

**ISTEP+: Grade 4 Mathematics
Blueprint**

Standards Assessed	Description	Percent Range *
1 – Number Sense	Questions may include identifying whole numbers up to one million given a place-value model; rounding whole numbers; ordering and comparing whole numbers; renaming and rewriting whole numbers as fractions and mixed numbers as improper fractions; writing tenths and hundredths in decimal and fraction notations; identifying fraction and decimal equivalents; and rounding decimals.	16-26%
2 – Computation	Questions may include solving problems involving addition, subtraction, multiplication, and division of whole numbers; multiplying and dividing numbers up to 100 by numbers up to 10; adding and subtracting decimals and simple fractions with different denominators.	12-22%
3 – Algebra and Functions	Questions may include demonstrating an understanding of the concept of a variable; using and interpreting formulas; applying inverse relationships while solving problems; relating problem situations to number sentences involving multiplication and division; and plotting and labeling whole numbers on a number line.	7-17%
4 – Geometry	Questions may include identifying and describing a variety of geometric figures, including rays, angles, parallel and perpendicular lines, parallelograms, rhombuses, and trapezoids; identifying congruent shapes and describing congruency using sides, angles, parallels and perpendiculars; and identifying and drawing lines of symmetry in polygons.	7-17%
5 – Measurement	Questions may include measuring length; adding and subtracting units of length by renaming feet to inches or meters to centimeters; knowing and using formulas to find the perimeter and area; finding area of complex shapes; determining volume and capacity; adding time intervals involving hours and minutes; and determining change from purchases.	9-19%
6 – Data Analysis and Probability	Questions may include representing data on a number line and in tables (including frequency tables); interpreting data graphs and using the data to answer questions; and summarizing or displaying results of probability experiments.	5-15%
7 – Problem Solving	Questions may include solving problems by identifying relationships among numbers; distinguishing relevant and irrelevant information; sequencing and prioritizing information; observing patterns; applying strategies and results from simpler problems to solve more complex problems; expressing solutions clearly and logically using words, numbers, and symbols (pictures); making precise calculations; and determining if solutions are reasonable.	9-19%

* This range represents the approximate emphasis for each standard on the assessment.